(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
1 February 2001 (01.02.2001)

PCT

(10) International Publication Number
WO 01/08138 A1

(51) International Patent Classification[7]: G11B 5/55

(21) International Application Number: PCT/US00/19814

(22) International Filing Date: 21 July 2000 (21.07.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/145,503 23 July 1999 (23.07.1999) US

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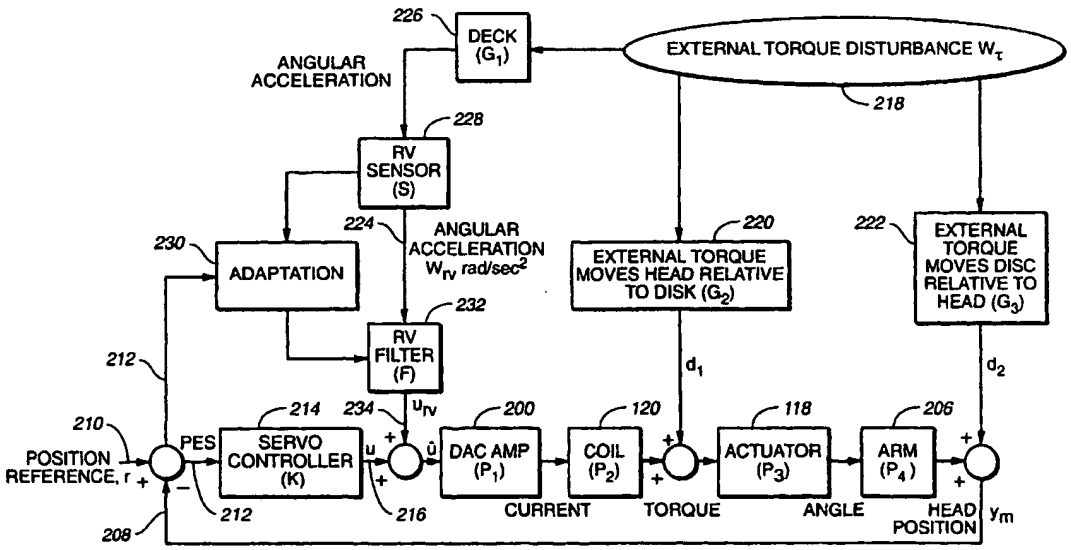
(81) Designated States *(national)*: CN, DE, GB, JP, KR, SG.

Published:
— *With international search report.*
— *With amended claims and statement.*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DISTURBANCE REJECTION FOR DISC DRIVES USING ADAPTIVE ACCELEROMETER FEEDFORWARD SERVO



(57) Abstract: A system and method for attenuating the effect of rotational vibration on the positioning of the read/write head (116) in a disc drive (110). The rotational acceleration of the disc drive body (110) is sensed and applied to an adaptive filter (230, 232) that produces a feedforward signal (234) designed to offset the effects of the rotational vibration. The adaptive filter (230, 232) adjusts its parameters based on the rotational acceleration signal (224), the position error signal of the servo system (212), and a transfer function relating the actual position signal (208) to the feedforward signal (234). The plant estimate of the transfer function relating the actual position signal to the feedforward signal is determined off-line and stored for use by the adaptive filter (230, 232) in adjusting its parameters during operation.

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